

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

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(M.)

1. (Canceled)

2. (Currently Amended) A method according to claim 1, wherein the comparison is performed in a LPC decoding block.

3. (Currently Amended) ~~A method according to claim 2,~~ An automatic decoding method for mapping and selecting a non-volatile memory device having a LPC serial communication interface, wherein the memory is equipped with a plurality of addressing pins and mounted on a motherboard together with other memories of the same type bidirectionally connected with a controller putting it into communication with a processor housed in turn on the motherboard, comprising:

a processor that compares the addressing pins of each memory with a portion of a plurality of addressing coding bits both to identify an addressing type to be used, top-down or bottom-up, and to determine which memory is polled by the controller for a given operation;

wherein the addressing coding is a thirty-two-bit coding and the most significant bits A<31:25> are used to identify the addressing type, while some intermediate bits A<24:21> are used for being compared with the addressing pins to determine which memory is polled by the controller.

4. (Original) A method according to claim 3, wherein the most significant bits A<31:25> are processed in a selecting block in the LPC decoding to generate respective identification signals of the addressing type.